

**Docket No. 217 – Development and Management Plan Inspection**

Northeast Utilities Service Company Certificate of Environmental Compatibility and Public Need for the construction of a 345-kV electric transmission line and reconstruction of an existing 115-kV electric transmission line between Connecticut Light and Power Company's Plumtree Substation in Bethel, through the towns of Redding, Weston, and Wilton, and to the Norwalk Substation in Norwalk, Connecticut.

**Date:** April 12, 2006

**Inspector:** Lee Curtis and Diana Walden

**Location:** Overhead Line (Composite 345kV and 115kV Gallows Hill to Archers Lane, 345kV H-Frame Hoyts Hill to Gallows Hill, and Norwalk Section)

**Storm/**

**Rain Event:** Approximately 0.57" of precipitation was recorded over 4/7-4/8 as reported by NOAA

Areas of Inspection	Observation	Recommended Action	Corrective Action
Access Roads and Adjacent Roadways  <b>Composite</b>	<p>- The Composite ROW work is accessible from Gallows Hill Road by an existing trail path with a swing gate, an approved access path in from the east of the ROW, an access road passing through the Archers Lane substation, and an area cleared from the station to the ROW. 4/12/06.</p> <p>- Clearing will still need to continue past Archers Lane. Wood chips have been blown off the cleared ROW in some areas. See the vegetative clearing section for more details. 3/2-4/12/06.</p> <p>- Water levels at the 2<sup>nd</sup> wetland crossing on the access road at Archers Lane have remained below problem levels. 4/12/06.</p> <p>- A skidder had slipped off the road into the 3<sup>rd</sup> wetland area 2/16/06.</p>	<p>- If necessary, additional measures for stability should be considered for access needs. If any areas still have ruts at the end of the work, they will need to be regraded to return to original conditions. 12/8-4/12/06.</p> <p>-See vegetative clearing section for details and recommendations. 4/12/06.</p> <p>- Continue to monitor. 4/12/06.</p> <p>- The damage should be repaired at the 3<sup>rd</sup> wetland. See erosion control section for more</p>	<p>-N/A until evaluation at the end of work.</p> <p>-N/A at this time</p>

Areas of Inspection	Observation	Recommended Action	Corrective Action
<b>345kV H-Frame</b>	Haybales had been placed but ruts in the wetland remain. 3/9-4/12/06.	details. 2/16- 4/12/06.	
	- Other work areas are accessed from Hoyts Hill, Chestnut Ridge Rd, the Bethel Reservoir water plant road, Lime Kiln Rd, Whortleberry Rd, John Todd Way and Costa Lane. Wood chips were placed along a majority of the access roads. 3/29-4/12/06.	-Continue to monitor the conditions of all access roads. If muddy conditions re-occur, place more wood chips or consider installing silt fence as needed. 4/12/06.	- N/A at this time
	-Stone dust is used on the access roads at Costa Lane and John Todd Way. 3/2-4/12/06.		
	-Mats are in place in the wetland locations in all of the H-frame sections. Watch the crossings for muddy conditions and monitor erosion controls. 2/22-4/12/06.	- Continue to monitor for muddy conditions and repair controls when necessary. 4/12/06.	-N/A at this time
	- The mat bridge between poles #10-11 for access to bring in the poles remains in good shape. 4/12/06.	- The streambed and water main remain protected. 3/23-4/12/06.	-N/A
	-Ruts were noted in the access road due to heavy equipment. 4/6-4/12/06.	-This should be restored eventually. 4/12/06	-N/A at this time
<b>Norwalk Section</b>	-There was no sediment tracking at the various road/ROW intersections. 3/9-4/12/06.	- Continue to monitor. Install stone at road access points or sweep the street as necessary. 3/9-4/12/06.	-N/A at this time
	- Stone dust access roads are in place to the north and south of Perry Ave and north of Broad St. 4/6-4/12/06	- Controls are in place. 4/12/06.	- N/A at this time
		- None at this time.	

Areas of Inspection	Observation	Recommended Action	Corrective Action
	<p>- Stone was placed in the ROW to the south of Broad St. 4/12/06</p> <p>-Some work is also accessed off the cul-de-sac at April Lane. 4/12/06</p>	<p>4/12/06</p> <p>- None at this time. 4/12/06</p>	<p>- N/A</p> <p>-N/A</p>
<p>Foundation construction</p> <p><b>Composite</b></p> <p><b>345kV H-Frame</b></p>	<p>-The only current work in this section is related to clearing. 3/2-4/12/06.</p> <p>-Poles remain in place for installation in some locations along the Bethel Reservoir section. Wooden pole installation continues here. All poles except #1 are in place in the Chestnut Ridge section. 4/6-4/12/06.</p>	<p>-See erosion control and clearing sections. 4/12/06.</p> <p>- None at this time. 4/12/06.</p>	<p>-N/A</p> <p>-N/A</p>
<p><b>Norwalk Section</b></p>	<p>- Most poles are up in the Costa Lane section. Pole installation continues near John Todd Way. 4/6-4/12/06.</p> <p>-Foundation drilling and pouring continues to the north of Perry Ave. (off April Lane) as well as north of Broad St. 4/6-4/12/06.</p> <p>-Foundation drilling was also noted in the ROW west of Norwalk Junction. 4/12/06</p>	<p>-None at this time. 4/12/06</p> <p>-See dewatering and erosion controls section for more information. 4/6-4/12/06.</p> <p>-None at this time</p>	<p>-N/A</p> <p>-N/A</p> <p>-N/A</p>
<p>Erosion and Sediment Controls</p> <p><b>Composite</b></p>	<p>- Water levels appear to remain low at the 2<sup>nd</sup> wetland crossing along the Archers Lane access road. 2/16-4/12/06.</p> <p>-The erosion controls at near the first turn at the first tower have been repaired. 4/12/06.</p>	<p>- None at this time. 4/12/06.</p> <p>-None at this time. 4/12/06.</p>	<p>-N/A</p> <p>-Erosion controls have been repaired here.</p>

Areas of Inspection	Observation	Recommended Action	Corrective Action
Erosion controls continued	<ul style="list-style-type: none"> <li>- A skidder had slipped off the road into the 3<sup>rd</sup> wetland area. Haybales had been placed but ruts in the wetland remain. 3/2-4/12/06.</li> <li>- Efforts are being made to remove sediment accumulation near the Archers Lane area wetlands. 4/6-4/12/06.</li> <li>- Wood chips had been blown into the uplands and wetland area at the third structure in from Gallows Hill Road. 2/22-4/12/06. Another area with deep wood chips off the cleared ROW remains past Archers Lane. 3/15-4/12/06</li> <li>- Controls remain in good shape at the wetland at the 2<sup>nd</sup> structure off Gallows Hill. 4/6-4/12/06.</li> </ul>	<ul style="list-style-type: none"> <li>- Damage to the wetland should be repaired. 2/16-4/12/06.</li> <li>- In areas where sediment is substantial and feasibly removable, contractors will continue to take it out carefully by hand. 4/12/06.</li> <li>- Make sure chips stay on the ROW. Contractors to should remove the off ROW chips since this is not allowed in the D&amp;M plan. 2/22-4/12/06.</li> <li>- Wood chips on the ROW can remain at a depth of 3". Deeper piles should be spread out. 4/6-4/12/06</li> <li>- None at this time. Continue to monitor and keep activity out of the various wetland habitats as feasible. 4/12/06.</li> </ul>	<ul style="list-style-type: none"> <li>- Efforts to remove sediment are underway</li> <li>- CL&amp;P is looking into a solution here.</li> </ul>
345kV H-Frame Chestnut Ridge Section	<ul style="list-style-type: none"> <li>- The majority of the pile at structure#6 has been removed. 4/12/06.</li> <li>- The stockpile near structure #9 has been removed, but the silt fence should remain maintained in this area. 4/6-4/12/06.</li> <li>- Silt fence and mats remain in place in a number of locations in this section. 4/6-4/12/06.</li> </ul>	<ul style="list-style-type: none"> <li>- Remove the soil here as soon as conditions can support this without further impact. 2/22-4/12/06.</li> <li>- Continue to monitor and maintain silt fence here until the area is stabilized. 4/6-4/12/06.</li> <li>- Continue to monitor for any muddy conditions or need for repairs. All observed controls remain in good condition. 4/6-4/12/06.</li> </ul>	<ul style="list-style-type: none"> <li>-N/A.</li> <li>-N/A</li> </ul>
Bethel Reservoir Section to			

Areas of Inspection	Observation	Recommended Action	Corrective Action
Chestnut Ridge Rd.	- Mats remain well in place over the stream between poles #10-11. Erosion controls remain well installed at the "corners" and along the second wet area. 3/29-4/12/06.	- None at this time. Continue to monitor this area due to heavy use and maintain as needed. 4/6-4/12/06.	- N/A.
Costa Lane, Whortleberry, Lime Kiln and John Todd Way	-Mats are in place at the wetland crossing in the vicinity of pole #29. 3/2-4/6-4/12/06.	-Continue to monitor the crossing for increasing muddy conditions and install silt fence as needed. 3/2-4/12/06.	-N/A at this time
	-Silt fence has been installed around stockpiles resulting from the foundation excavations at a number of structure locations. 4/6-4/12/06.	-Continue to monitor the erosion controls and remove stockpiles when feasible. 4/12/06.	N/A at this time
<b>Norwalk Section</b>	-Poles #24 and 25 are on either sides of a large wetland system and dewatering corrals were set up adjacent to the silt fence. 4/12/06.	- Limited work space reduces options here. Monitor carefully due to its proximity to the wetland. 3/9-4/12/06 See dewatering for more info	-N/A.
	- Silt fence remains in good repair at foundations south of Perry Ave. 4/6-4/12/06.	-Continue to maintain the silt fence in this area and utilize it as a limit of work due to the proximity of the channel. 4/12/06.	
	-Silt fence was installed as recommended at the foundation drilling north of Perry Ave near Rt.7 4/12/06.	-None at this time. 4/12/06.	-Silt fence was installed.
	- Silt fence remained in place at several locations north of Broad St., including near the river. 4/12/06	- Continue to maintain fence due to its proximity to resource areas. 4/12/06	-N/A (silt fence installed proactively)
	- Several spots of concrete were noted on the ground here but there	- Pick up the spills of hardened concrete and	

Areas of Inspection	Observation	Recommended Action	Corrective Action
	<p>was also a dug pit which appeared to contain concrete. 4/12/06</p> <p>-Silt fence was installed at the foundation drilling near Norwalk Junction. 4/12/06</p>	<p>line any washout areas with plastic from now on. 4/12/06</p> <p>- Continue to maintain fence due to its proximity to resource areas and watch dewatering carefully. 4/12/06</p>	<p>-N/A (silt fence installed proactively)</p>
<p>Inland Wetland and Watercourse encroachment and mitigation</p> <p><b>Composite</b></p>	<p>-The D&amp;M plan approved stone on geotextile fabric at the wetland crossings have worked well. Efforts were made near Archers Lane to start removing some accumulated sediment. 4/6-4/12/06.</p> <p>- Direct damage was noted in the wetland at the 3<sup>rd</sup> crossing as a result of equipment slipping. 2/16-4/12/06.</p> <p>- Efforts were also being made near the 1<sup>st</sup> crossing to remove noticeable sediment deposits in the wetland. 4/6-4/12/06.</p> <p>- Use caution in clearing trees from wetland areas. Avoid creating ruts when skidding them out. Wood debris at the wetland near Gallows Hill will be left in place within the first ~30 feet from the wetland. 3/29-4/12/06.</p> <p>- Use caution in removing trees from wetland areas or adjacent to streams in this section as well. Avoid creating ruts when skidding them out. 1/19-4/12/06.</p> <p>-If a wetland is being</p>	<p>- As the access is considered temporary, the stone will be removed when final work ends so the wetlands can be restored. 1/26-4/12/06.</p> <p>- The damage to the 3<sup>rd</sup> wetland should be repaired. 4/12/06.</p> <p>- The crossing could also use some clean stone if necessary which may help reduce additional sediment deposits. 1/4-4/6-4/12/06.</p> <p>- Retain shrubs and low growth as much as possible. 3/2-4/6/06.</p> <p>- If damage is noted during the spring, the previously created ruts should be repaired if possible. 3/9/06-4/12/06.</p> <p>- Try to leave shrubs and low growth where possible, especially at stream buffers. 2/2-4/12/06.</p>	<p>-N/A until evaluated at the end of work.</p> <p>(Efforts are underway to remove accumulated sediment in some areas)</p> <p>-Efforts have been made to remove sediment.</p>
<b>345kV H-Frame</b>			

Areas of Inspection	Observation	Recommended Action	Corrective Action
<b>Norwalk Section</b>	<p>used as amphibian breeding habitat, retaining some wood debris at its boundaries may be beneficial. 3/2-4/12/06.</p> <p>- At structure #6, most of the mud was removed from the wetland and they will continue to do so. 4/12/06.</p> <p>-Foundations being drilled/installed are adjacent to wetlands and waterbodies but controls have been installed or repaired and are in good shape. 4/6-4/12/06.</p>	<p>-Carefully remove brush piles and trees from near wetland areas. 3/2-4/12/06.</p> <p>- Continue to remove entire pile. Conditions may be too muddy at this time. 2/16-4/12/06.</p> <p>-See erosion control section.</p>	<p>-Efforts to retain lower growth have been noted in this section.</p> <p>- Most sediment was removed, continue to do so.</p> <p>-N/A</p>
State species of concern, threatened and endangered species	<p>- The composite portion of overhead work includes state-listed turtle habitat area. 9/15-4/12/06.</p> <p>-The Eastern box turtle has not been observed since the first sighting but is likely emerging from hibernation. 4/6-4/12/06.</p>	<p>- Now that weather is warmer, it is time to recommence daily walkthroughs prior to work. 4/6-4/12/06.</p>	<p>-N/A at this time</p>
Vegetative clearing limits (including trees to save or danger trees noted)	<p>-Clearing had been noted in the composite section near Gallows Hill Rd. This includes work in wetlands. Adjacent homeowners mentioned damage to mountain laurel and other shrubs. 3/2-4/12/06.</p> <p>-An effort has been made to remove large branches and excess brush in the upland area of ROW between the 2<sup>nd</sup> and 3<sup>rd</sup> structure off Gallows Hill. 4/12/06.</p>	<p>-In general, take care in retaining shrubs and use mats to access or skid out trees from wetlands. 2/22-4/12/06.</p> <p>-Replace shrubs where necessary. 4/12/06</p> <p>-Continue to clear excess branches and brush from the upland portions of the ROW. Limbs and debris can remain in the wetland as well as within a "buffer" of ~30 feet on</p>	<p>-Large branches and brush have been piled for removal from the upland area of ROW between the 2<sup>nd</sup> and 3<sup>rd</sup> structure off Gallows Hill.</p>
<b>Composite</b>			

Areas of Inspection	Observation	Recommended Action	Corrective Action
<b>345kV H-Frame</b>	- A significant amount of chips were blown off the ROW into the upland and also along the wetland edge at the 3 <sup>rd</sup> structure off Gallows Hill. This could smother plants and reduce habitat. 2/22-4/12/06.	either side. 4/12/06.	- CL&P is looking into this.
	-This was also noted several structures past Archers Lane. 3/15-4/12/06.	- Chips currently off ROW boundaries should be removed carefully to comply with the D&M plan. 2/22-4/12/06. Chips on ROW should be spread to a depth of 3". 4/6-4/12/06.	
	-Clearing will need to continue along the ROW past Archers Lane and a number of trees are marked for removal in a wetland that serves as amphibian breeding habitat. 3/15-4/12/06.	- To avoid wetland damage, the trees will be sheared from the access road and felled out of the water. 3/15-4/12/06	- CL&P proposed the work under these specs.
	-Large branches and brush were noted in wetlands and stream areas in a number of locations. 2/9-4/12/06.	- Carefully remove any larger branches or brush strewn in streams and wetlands which are not currently being used for amphibian breeding habitat 3/15-4/12/06.	
<b>Norwalk Section</b>	-In all sections make efforts to retain shrubs, especially in wetland areas. Efforts have been noted in some areas but could have improved in others. 3/15-4/12/06.	-Keep clearing to what is necessary. The D&M plan states low growing shrubs can remain. 12/22-4/12/06.	-N/A
	- Some clearing was noted to the north of Perry Ave. 4/12/06	- None at this time. 4/12/06.	
	-Clearing had occurred to create two corridors into Norwalk Junction. 4/12/06	- None at this time. 4/12/06	-N/A



Areas of Inspection	Observation	Recommended Action	Corrective Action
Dewatering	<p>-Dewatering corrals had been constructed at structures 24 &amp; 25 located off Lime Kiln Road and John Todd Way. Corrals were placed directly upgradient of the wetland areas due to topography and limited workspace. No active dewatering was occurring during the inspection. 4/12/06.</p> <p>- No obvious dewatering efforts were noted at the remaining structures 4/12/06.</p> <p>-Watch areas of necessary dewatering in the Norwalk Section as many foundations are immediately adjacent to resource areas 4/12/06.</p>	<p>-Monitor the dewatering activities at structures #24 and 25 in order to avoid impacting the adjacent wetland areas. If corrals are not functioning properly an alternative method, such as filter bags, will need to be used immediately in these areas.</p> <p>- Release water to the ground only in well vegetated areas if it will not reach any resource areas. (Make sure to check downgradient for these areas) Otherwise use a filter bag or adequate containment. 3/9-4/6/06.</p>	<p>-N/A at this time</p> <p>-N/A at this time</p>
Blasting	-No blasting has been necessary at this time on the ROW. 4/12/06.	-None at this time. 4/12/06.	-N/A
Spills and Material Storage	-None of the parked or active equipment was leaking at the time of inspection, but there was an old spill noted on the access road between the 2 <sup>nd</sup> and 3 <sup>rd</sup> structure in from Gallows Hill. 3/15-4/12/06.	<p>-Clean the affected area and investigate the source of the fuel leak. 3/15-3/29/06.</p> <p>- Continue to keep all vehicles maintained well (i.e. no apparent fluid leaks) if they will be used or stored on site</p> <p>- Keep adequately size fuel kits for worst case scenarios.</p> <p>- Report spills immediately, even if they are being controlled.</p> <p>- Avoid refueling in the areas near the wetlands. Use proper storage for all materials.</p>	
Additional			

Areas of Inspection	Observation	Recommended Action	Corrective Action
Observations			

**Next likely scheduled inspection:** Thursday April 20, 2006

I have personally examined and am familiar with the information submitted in this document and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statements made in this document or its attachments may be punishable as a criminal offense in accordance with Section 22a-6 under Section 53a-157 of the Connecticut General Statutes.

**Inspector's Signature:** Diana Walden for Lee Curtis



**(Composite Section-Archers Lane):** Photo on the left shows a view of the newly installed structure adjacent to the Archers Lane station pad. Photo on the right shows a view of the 2nd wetland crossing where some sediment has been removed. Erosion controls are still functioning well here. 4/12/06



Photo on the left shows a view the repaired silt fence near the turn off to the first tower from Archers Lane. Photo on the right shows the skidder damage remaining in the wetland at the 3<sup>rd</sup> crossing past Archers Lane. 4/12/06.





**(Composite Section-Gallows Hill and 345kV H-Frame):** Photo on the left shows the ROW area between the 2nd and 3rd structures off GH where efforts are being made to remove branches and brush. Photo on the right shows near structure #19 where poles have been placed for installation. Due to the topography and small work area, poles have been placed outside the silt fence, adjacent to the wetland. 4/12/06.



**(345kV H-Frame)** Photo on the left shows silt fence repairs and an overall view of the preparation work for installation of pole #19. Photo on the right shows pole components being stored in the wetland at this side as well. 4/12/06.





**(345kV H-Frame Chestnut Ridge Section) Photo on the left shows a view of the remaining soil at pole #6. Photo on the right shows a view of pole #1 where crews were preparing the area for installation. 4/12/06.**



**(345kV H-Frame Lime Kiln Road) Both photos show a view of the work area at pole #25. Photo on the right shows the dewatering corral that was constructed adjacent to the wetland. Due to the limited workspace and size of the wetland there was little alternative for placement of the corral.**

**Dewatering activities will be monitored and alternative methods discussed if problems occur.**

**4/12/06.**





**(345kV H-Frame off John Todd Way) Both photos show a view of the work area near structure #24. Photo on the right shows the dewatering corral placed adjacent to the wetland. Due to the limited workspace and size of the wetland there was little alternative for placement of the corral. Dewatering activities will be monitored and alternative methods discussed if problems occur.**



**(345kV H-Frame off Costa Lane and Norwalk Section) Photo on the left shows a view of the wetland crossing located in the vicinity of pole#29. Erosion controls are functioning well here. Photo on the right shows the ROW south of Broad St. where stone was placed. Check silt fence status prior to beginning work. 4/12/06**





**(345kV H-Frame Norwalk Section) North of Broad St.: Photo on the left shows a foundation area where erosion controls are installed adjacent to the wetland. Photo on the right shows a pit dug potentially for washing out concrete. A liner should have been installed. 4/12/06**



**Photo on the left shows a view of more foundation work, immediately north of Broad St. Erosion controls are in place by the river. Photo on the right shows one of several concrete washout spots that should be removed and controlled. 4/12/06**





**(345kV H-Frame Norwalk Section) Perry Ave and Norwalk Jct.: Photo on the left shows a view of the clearing and work north of Perry Ave. Photo on the right shows the clearing beyond the Norwalk River for one of the corridors into the transition station. 4/12/06**



**Norwalk Jct Area: Photo on the left shows a view of foundation work adjacent to the ponded area. Erosion controls were up. Photo on the right shows the second cleared corridor into the transition station where stone was placed. 4/12/06**